

McDermott Will & Emery

**RECEIVED
CENTRAL FAX CENTER****FEB 17 2009**Boston Brussels Chicago Düsseldorf Houston London Los Angeles Miami Munich
New York Orange County Rome San Diego Silicon Valley Washington, D.C.

Strategic alliance with MWE China Law Offices (Shanghai)

FACSIMILE**Date:** February 17, 2009**Time Sent:**

To:	Company:	Facsimile No:	Telephone No:
Examiner Allan Olsen	U.S. PATENT AND TRADEMARK OFFICE	571-273-8300	
From:	Takashi Saito	<i>Direct Phone:</i>	+1 202 756 8244
<i>E-Mail:</i>	tsaito@mwc.com	<i>Direct Fax:</i>	+1 202 756 8087
<i>Sent By:</i>	Matilda Mason	<i>Direct Phone:</i>	202-756-8661
<i>Client/Matter/Tkpr:</i>	050212-0559/10092	<i>Original to Follow by Mail:</i>	No
		<i>Number of Pages, Including Cover:</i>	4
Re:	Application Serial No. 10/774,417 Attorney Docket No.: 050212-0559		

Message:

The information contained in this facsimile message is legally privileged and confidential information intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution, or copy of this facsimile is strictly prohibited. If you have received this facsimile in error, please notify us immediately by telephone and return the original message to us at the below address by mail. Thank you.

IF YOU DO NOT RECEIVE ALL OF THE PAGES, PLEASE CALL MATILDA MASON AT 202-756-8661 AS SOON AS POSSIBLE.

Main Facsimile: +1 202 756 8087 Facsimile Operator: +1 202 756 8090

U.S. practice conducted through McDermott Will & Emery LLP.
600 Thirteenth Street, N.W. Washington, D.C. 20005-3096

Telephone: +1 202 756 8000

McDermott Will & Emery

Boston Brussels Chicago Dusseldorf Houston London Los Angeles Miami Munich
New York Orange County Rome San Diego Silicon Valley Washington, D.C.
Strategic alliance with MWE China Law Offices (Shanghai)

RECEIVED
CENTRAL FAX CENTER

FEB 17 2009

Takashi Saito
Attorney at Law
tsaito@mwe.com
+1 202 756 8244

February 17, 2009

VIA FACSIMILE (571-273-8300)

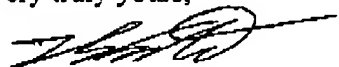
Examiner Allan Olsen
The U.S. Patent and Trademark Office

Re: U.S. Patent Application No. 10/774,417
For: METHOD OF MAKING DIAMOND PRODUCT AND DIAMOND
PRODUCT
Inventor: Yosihki NISHIBAYASHI, et al.
Our Reference: 050212-0559

Dear Mr. Olsen:

Regarding the above identified application, our client agreed the Examiner's amendment. Attached please find our proposed amendments to independent claims 1 and 12 for the Examiner's amendment. If you have any questions or comments regarding the amendments, or you need further amendments, please let us know.

Very truly yours,



Takashi Saito (Limited Recognition No. L0123)

BKS/TS/

Enclosures

*Not admitted to practice in the District of Columbia; admitted only in NY.
Supervised by principals of the Firm who are members of the District of Columbia Bar.

10/774,417

February 17, 2009

Page 2

Proposed Claim Amendment (Independent claims 1 and 12 only)

1. (Currently Amended) A method of making a diamond product having a projection or a depression on a surface thereof by etching, said method comprising the steps of:

forming a diamond substrate with a mask layer including a metal layer in at least one part thereof; [[and]]

etching said diamond substrate formed with said mask layer with a plasma of a mixed gas composed of a gas containing an oxygen atom a gas containing a fluorine atom; and

monitoring intensity ratio A/B of the mixed gas, where A is an intensity of an emission peak caused by atomic oxygen and B is an intensity of an emission peak caused by molecular oxygen,

wherein said fluorine atom has a concentration within the range of 0.04% to 6% with respect to the total number of atoms in said mixed gas, said plasma is produced by generating a high-frequency discharge between two plate electrodes, said high-frequency discharge is generated by supplying an electric power of less than 1.0 not less than 0.28 W/cm² between said plate electrodes, and said mixed gas further contains nitrogen gas, thereby to form the diamond product having the projection or depression with a side face with an angle of inclination of at least 78 degrees,

wherein said mixed gas contains nitrogen gas in an amount such that the intensity ratio A/B of said mixture is greater than the intensity ratio A/B of the mixed gas with no nitrogen; ~~where A is the intensity of an emission peak caused by atomic oxygen and B is the intensity of an emission peak caused by molecular oxygen.~~

10/774,417
February 17, 2009
Page 3

12. (Currently Amended) A method of making a diamond product by etching a diamond substrate, said method comprising the steps of:

etching said diamond substrate using a plasma of a mixed gas, wherein the plasma of the mixed gas comprises oxygen atoms, fluorine atoms, and nitrogen atoms;

generating a high-frequency discharge between two plate electrodes by supplying an electric power of less than 1.0 not less than 0.28 W/cm² between said plate electrodes;

monitoring intensity ratio A/B of the mixed gas, where A is an intensity of an emission peak caused by atomic oxygen and B is an intensity of an emission peak caused by molecular oxygen, and

wherein the mixed gas has a fluorine atom concentration within the range of 0.04% to 6% with respect to the total number of atoms in said mixed gas, and

wherein said mixed gas contains nitrogen gas in an amount such that the intensity ratio A/B of said mixture is greater than the intensity ratio A/B of the mixed gas with no nitrogen, ~~where A is the intensity of an emission peak caused by atomic oxygen and B is the intensity of an emission peak caused by molecular oxygen.~~

WDC99 1686123-1.050212.0559